ABSTRACT OF THE DISCLOSURE

A moldable resin for producing a molded part. The resin is reinforced with shape memory alloy (SMA) particles. In one preferred form NITINOL® alloy particles are used for the SMA particles. The NITINOL® alloy particles may comprise cylindrical, oval or spherical shaped particles. The SMA particles provide superelastic, reversible strain properties that significantly improve the damage resistance, damage tolerance (e.g. compression-after-impact (CAI) strength) and elevated temperature performance of the part without negatively affecting the hot-wet compression strength of the part.